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LANGDON MARSH

Acting Commissioner

STATE OF NEW YORK
DEPARTMENT OF
ENVIRONMENTAL CONSERVATION
ALBANY, NEW YORK 12233-1015

MAY 23 1994

Ms. Jeanne Fox
Regional Administrator
United State Environmental Protection Agency
Region II
26 Federal Plaza
New York, New York 10278

Dear Ms. Fox:

Enclosed is the 1993 New York State Capacity Assurance Plan (CAP) required under Section 104(c)(9) of the Comprehensive Environmental Response and Liability Act, (CERCLA), as amended (42U.S.C. §9604(c)(9)). This is our Phase I CAP submittal.

Under this section of CERCLA, the United States Environmental Protection Agency (USEPA) requires, as a condition for providing remedial action funding, that states assure the availability of treatment and disposal facilities that have the capacity to treat, destroy or securely dispose of the hazardous waste reasonably expected to be generated within their borders for 20 years. This 1993 New York State CAP provides a basis for you to evaluate the assurances of New York State that are required to be contained in a CERCLA contract or cooperative agreement. Those contracts or cooperative agreements will incorporate this document by reference.

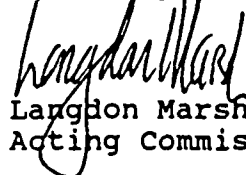
The enclosed 1993 New York State Phase I CAP: 1) demonstrates that New York State has described its current hazardous waste management system, including on-going waste minimization program activities; 2) has projected the demand for commercial hazardous waste management capacity from recurrent hazardous wastes generated in New York State for the next 20 years; and 3) has projected the commercial hazardous waste management capacity available within New York State for the next 20 years. I certify that this information is accurate, complete, and has been developed in good faith.

Ms. Jeanne Fox

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I hereby transmit this document, which, in addition to any Phase 2 or Phase 3 capacity assurance planning documents that may be required to address shortfalls in national capacity, will form the basis for the assurances required of New York State under 42 U.S.C. §9604(c)(9).

Sincerely,


Langdon Marsh
Acting Commissioner

Enclosure

cc: Capacity Programs Branch OS-321W
United States Environmental Protection Agency
Office of Solid Waste
401 M Street
Washington D.C. 20460

ATT: Phase 1 Capacity Assurance Submittal Enclosed

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS SUBSTANCES REGULATION
50 WOLF ROAD
ALBANY, NEW YORK 12233-7250

**1993 HAZARDOUS WASTE CAPACITY ASSURANCE PLAN
FOR
NEW YORK STATE
PHASE 1**

APRIL 30, 1994

**Langdon Marsh
Acting Commissioner**

**Norman H. Nosenchuck, P.E.
Director**

Introduction

This is the New York State 1993 Capacity Assurance Plan (CAP) for hazardous waste management. This Plan has been prepared according to the instructions provided by the United States Environmental Protection Agency (USEPA) in its publication "Guidance For Capacity Assurance Planning: Capacity Planning Pursuant to CERCLA §104(c)(9)." dated May, 1993. Biennial Report data received in 1991 from large quantity generators and from Treatment, Storage and Disposal facilities were used as the basic data source. Confidential Business Information (CBI) data not available for this report, has been sent to Margaret Lee, United States Environmental Protection Agency CBI Officer, Washington, D.C. pursuant to instructions contained in the March, 1994 document "Questions and Answers - Capacity Assurance Planning (Pursuant to 1993 Guidance Document For Capacity Assurance Planning." The data was edited by the basic, and advanced edits provided through the USEPA Biennial Report Software. Numerical data was verified by cross reference and comparison with the New York State Hazardous Waste Manifest database. New York State believes that this Capacity Assurance Plan adequately addresses all of the requirements in the USEPA guidance.

New York State has been among the leading states in developing a long-term plan for assessing hazardous waste management capacity needs and ensuring the availability of needed hazardous waste management capacity. As a example, the State's Hazardous Waste Facility Siting Plan represents a major planning effort. Data used to develop the Siting Plan will be compared to the CAP data and the State Siting Plan will be updated to address future hazardous waste management capacity needs.

New York State believes that this 1993 CAP demonstrates a thorough understanding of the Hazardous Waste Management system in New York State and provides the USEPA with an adequate assurance of capacity.

BASEYEAR DATA

The following is a discussion of the features common to all CAP tables; (1) transfer facilities; (2) interstate hazardous waste imports and exports; (3) international hazardous waste imports and exports; (4) mixed hazardous/radioactive wastes; and (5) demand on hazardous waste management capacity from recurrent and one-time waste in 1991.

CAP Management Categories

Each CAP Management Category is comprised of a number of waste management technologies that are generally interchangeable for managing broad types of wastes (e.g., organics, inorganics including metals, and wastewaters), based on treatment performance.

The CAP Management Categories are defined in terms of the 1991 Biennial Report System Type codes that correspond to specific types of waste management systems as reported on the following Biennial Report Forms: Waste Generation and Management (GM), Waste Received From Off Site (WR), and Waste Treatment, Disposal, or Recycling Process Systems (PS). Exhibit 2-1 presents Biennial Report System Type codes and the CAP Management Categories to which it was assigned.

Two Biennial Report System Type codes are not assigned to a CAP Management Category: 1) M135 Direct discharge to sewer/POTW (no prior treatment); and 2) M136 Direct discharge to surface water under NPDES (no prior treatment). Because these systems manage wastes that are not defined as solid wastes (40 CFR 261.4(a)), they are outside of the scope of the CAPs.

Three System Type codes (i.e., M049 Incineration - type unknown; M059 Energy recovery - type unknown; and M137 Other disposal) are applicable to more than one CAP Management Category; consequently, they are defined under all relevant categories. These System Type codes are reassigned to more appropriate CAP Management Categories based on waste management reported by the receiving facility or the physical form of the waste and knowledge of waste management systems available at the receiving facility.

The Transfer/Storage CAP Management Category was created because of the difficulties in determining the ultimate disposal of wastes exported to transfer facilities. This category is applicable only for exported waste presented in the baseyear tables.

Exhibit 2-1 CAP Management Category/Assignment

RECOVERY

Metals Recovery

M011*	High temperature metals recovery
M012	Retorting
M013	Secondary smelting
M014	Other metals recovery for reuse: e.g., ion exchange, reverse osmosis, acid leaching
M019	Metals recovery - type unknown

Inorganics Recovery

M031	Acid regeneration
M039	Other recovery - type unknown

Organics Recovery

M021	Fractionation/distillation
M022	Thin film evaporation
M023	Solvent extraction
M024	Other solvent recovery
M029	Solvents recovery - type unknown
M032	Other recovery: e.g., waste oil recovery, nonsolvent organics recovery

Energy Recovery - Liquids

M051	Energy recovery - liquids
M059	Energy recovery - type unknown

Energy Recovery - Sludges/Solids

M052	Energy recovery - sludges
M053	Energy recovery - solids
M059	Energy recovery - type unknown

* System Type codes as defined in: U.S. Environmental Protection Agency, 1991 Hazardous Waste Report Instructions and Forms, EPA Form 8700-13A/B (5-80) (Revised 08-91), OMB #2050-0024, pp. 90-91.

Exhibit 2-1 (continued)
CAP Management Categories

TREATMENT	
Stabilization/Chemical Fixation	
M111	Stabilization/chemical fixation using cementitious and/or pozzolanic materials
M112	Other stabilization
M119	Stabilization - type unknown
Incineration - Liquids and Gases	
M041	Incineration - liquids
M044	Incineration - gases
M049	Incineration - type unknown
Incineration - Sludges/Solids	
M042	Incineration - sludges
M043	Incineration - solids
M049	Incineration - type unknown
Fuel Blending	
M061	Fuel blending
Hazardous Wastewaters and Sludges Treatment	
M071	Chrome reduction followed by chemical precipitation
M072	Cyanide destruction followed by chemical precipitation
M073	Cyanide destruction only
M074	Chemical oxidation followed by chemical precipitation
M075	Chemical oxidation only
M076	Wet air oxidation
M077	Chemical precipitation
M078	Other aqueous inorganic treatment: e.g., ion exchange, reverse osmosis
M079	Aqueous inorganic treatment - type unknown
M081	Biological treatment
M082	Carbon adsorption
M083	Air/steam stripping
M084	Wet air oxidation
M085	Other aqueous organic treatment
M089	Aqueous organic treatment - type unknown
M091	Chemical precipitation in combination with biological treatment

Exhibit 2-1 (continued) CAP Management Categories

TREATMENT (continued)

M092	Chemical precipitation in combination with carbon adsorption
M093	Wet air oxidation
M094	Other organic/inorganic treatment
M099	Aqueous organic and inorganic treatment - type unknown
M101	Sludge dewatering
M102	Addition of excess lime
M103	Absorption/adsorption
M104	Solvent extraction
M109	Sludge treatment - type unknown
M121	Neutralization only
M122	Evaporation only
M123	Settling/clarification only
M124	Phase separation (e.g., emulsion breaking, filtration) only
M125	Other treatment
M129	Other treatment - type unknown

DISPOSAL

Landfill

M132	Landfill
M133	Surface impoundment (to be closed as a landfill)
M137	Other disposal

Deepwell/Underground Injection

M134	Deepwell/underground injection
M137	Other disposal

Land Treatment/Farming

M131	Land treatment/application/farming
M137	Other disposal

TRANSFER/STORAGE

Transfer/Storage

M141	Transfer facility storage, waste was shipped off site with no on-site treatment, disposal, or recycling (TDR) activity
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Transfer Facilities

Hazardous Waste Transfer facilities typically receive hazardous wastes and then ship these wastes to an off-site waste treatment or recycling facility. Tracking wastes shipped through transfer facilities is problematic for several reasons:

- ◆ Double counting of baseyear demand data can occur when wastes that are reported on the GM forms of both generators and transfer facilities are included in the baseyear and projection tables.
- ◆ Waste imported to in-state transfer facilities may be erroneously included as waste generated in state when quantities reported on the GM forms of in-state transfer facilities are included in the total of waste generated and managed in state. Consequently, demand for management of wastes generated in state would be overestimated.
- ◆ Waste imported to in-state transfer facilities or exported to out-of-state transfer facilities may be aggregated with in-state generated waste and sent to one or more waste management facilities; consequently, it is difficult to distinguish final management of imports or exports from final management of waste generated by other states.
- ◆ Waste shipped by transfer facilities may include waste from small quantity generators (SQGs) and/or wastes shipped during a previous reporting cycle, consequently a state may over estimate their baseyear demand.

To address these problems, New York State employed the following USEPA CAP guidelines:

- ◆ Disregard all waste quantities shipped by transfer facilities. These quantities of waste are accounted for by the reallocation of wastes shipped from generators to transfer facilities.
- ◆ For in-state generated waste, reallocate waste quantities shipped from generators to transfer facilities to appropriate in-state CAP Management Categories. If a transfer facility exports wastes for management out-of-state, these waste quantities are reported as exports, rather than reallocated to in-state CAP Management Categories.
- ◆ Reallocate waste quantities imported from other states to transfer facilities in New York to appropriate import CAP Management Categories. Waste quantities that are imported by New York transfer facilities and subsequently exported for management in another state are reported separately as imports transferred out-of-state.
- ◆ Report exports to transfer facilities located in other states in the baseyear tables. Reallocate these quantities to the appropriate CAP Management Categories for projecting future demand on capacity.

Quantities shipped to transfer facilities have been reallocated based on the distribution of CAP Management Categories to which each transfer facility shipped waste. The proportion of waste sent to each CAP Management Category is calculated by dividing the total waste shipped to each CAP Management Category by the total shipped by the transfer facility. Proportions are calculated for all transfer facilities and shipments received by each transfer facility are reallocated based on the associated proportions.

The advantage of this approach is that it does not require reallocation on a shipment-by-shipment level. Although, this option is sometimes inaccurate in terms of determining the technology that actually managed each shipment, this option will likely determine the appropriate CAP Management Category, due to the broad definitions of CAP Management Categories.

International Exports

USEPA CAP Guidance indicates that access to foreign treatment, disposal, and recycling capacity is unknown due to the uncertainty about continued availability; consequently, states cannot rely on this capacity for purposes of their CAP and must include estimates for international exports in their CAP tables. International exports are presented in the same way as interstate exports for the baseyear and for estimating demand on commercial capacity in the projection years. States may not have complete information on international exports because generators are not required to report on Biennial Report forms waste that was exported out of the country (40 CFR 262.41(b)). Generators who export their wastes to foreign countries, however, are required to submit annual reports of hazardous waste exports which are maintained by the Office of Waste Programs Enforcement (OWPE) according to 40 CFR 262.53. New York State obtained these reports from USEPA and used these reports to verify the completeness of the 1991 New York Biennial Report Database.

Mixed Hazardous/Radioactive Wastes

As discussed in the USEPA Guidance For Capacity Assurance Planning, adequate capacity does not currently exist for the treatment and disposal of mixed hazardous/radioactive wastes due to the technical difficulties involved in its treatment and the concerns about human exposure to radiation. Therefore, these wastes are not included in the baseyear or projection years. Mixed hazardous/radioactive wastes are identified in the 1991 Biennial Report on Form GM, Section I, Box I.

Demand on Capacity from Recurrent and One-time Waste

USEPA requires that states distinguish between recurrent and one-time wastes for those wastes generated within their borders that place demand on commercial management capacity in the baseyear. This distinction is necessary because projections include demand on commercial capacity from only recurrent wastes; USEPA has estimated the future demand on commercial capacity from one-time wastes. The baseyear demand for on-site and captive management capacity does not distinguish between recurrent and one-time wastes.

The Form GM Origin code was used to identify whether waste are recurrent or one-time. Wastes with the following GM Form Codes or Sources were also identified as onetime wastes.

FORM CODES

B002 Lab packs of debris only
 B301 Soil contaminated with organics
 B302 Ash, slag, or other residue from incineration of wastes
 B307 Metal scale, filings, or scrap
 B308 Empty or crushed metal drums or containers
 B310 Spent solid filters or adsorbents
 B311 Asbestos solids and debris
 B406 Empty fiber or plastic containers

SOURCE CODES

A61 Superfund Remedial Action
 A62 Superfund Emergency Response
 A63 RCRA Corrective Action at solid waste management unit
 A64 RCRA closure of hazardous waste management unit
 A65 Underground storage tank cleanup
 A69 (Other remediation)
 A93 Closure of management unit(s) or equipment other than by remediation specified in codes A61 - A69

BASEYEAR TABLES

As a component of its CAP, each state is required to demonstrate an understanding of its current RCRA Subtitle C hazardous waste generation and management system by providing information on the quantity of RCRA Subtitle C hazardous waste exported, imported, and generated and managed in state. States are required to report on RCRA Subtitle C hazardous waste, and non-RCRA Subtitle C hazardous waste that is considered hazardous under state regulations and is managed in hazardous waste management systems. Four CAP baseyear tables present this information.

- ◆ Table 1: 1991 Hazardous Waste Generated and Managed On Site;
- ◆ Table 2: 1991 Management of Hazardous Waste in Captive Systems;
- ◆ Table 3: 1991 Management of Hazardous Waste in Commercial Systems; and
- ◆ Table 4: Maximum Operational In-state Commercial Subtitle C Management Capacity - End of 1991.

Table 1. 1991 Hazardous Waste Generated and Managed On Site

Table 1 presents demand for on-site management of hazardous waste in New York State by CAP Management Category. This table shows how much waste is managed in systems on site and not available for captive or commercial use. Wastes that are generated and managed on site in commercial systems (treatment residuals), are included in Tables 2 and 3.

According to the CAP Guidance, states are not required to demonstrate adequate capacity for hazardous wastes that are managed in on-site systems. It is assumed that the capacity needed to manage hazardous wastes on site will continue to be available in future years unless significant events that will reduce this capacity can be identified. No specific events that will cause significant shifts from on-site to commercial management in New York State have been identified.

Table 1
New York State
1991 Hazardous Waste Generated and Managed On Site (tons)

CAP Management Category	Waste Managed On Site
RECOVERY	
Metals Recovery	21,840
Inorganics Recovery	3,800
Organics Recovery	4,210
Energy Recovery - Liquids	14,940
Energy Recovery - Sludges/Solids	30
TREATMENT	
Stabilization/Chemical Fixation	0
Incineration - Liquids and Gases	70,520
Incineration - Sludges/Solids	1,830
Fuel Blending	0
Hazardous Wastewaters and Sludges Treatment	50,496,060
DISPOSAL	
Landfill	0
Deepwell/Underground Injection	0
Land Treatment/Farming	0
TRANSFER/STORAGE	
Transfer/Storage	0

Table 2. 1991 Management of Hazardous Waste in Captive Systems

Table 2 presents the demand placed on captive management systems in 1991, divided into three columns: (1) waste exported to captive systems; (2) waste both generated and managed within the state in captive systems; and (3) waste imported for management in captive systems. This table summarizes management by the commercial status of the system, rather than the commercial status of the facility. This distinction is made because captive facilities can have on-site systems in addition to captive system(s). Demand on captive capacity from recurrent and one-time wastes is presented on Table 2, because states are not required to assure capacity for wastes managed in captive systems.

Table 2 does not include the demand placed on limited commercial capacity; this demand is included in Table 3. Mixed hazardous/radioactive wastes and wastes quantities shipped by transfer facilities are not included in Table 2.

Table 2

New York State
1991 Management of Hazardous Waste in Captive Systems (tons)

CAP Management Category	Exports	Waste Generated and Managed in State	Imports
RECOVERY			
Metals Recovery	170	80	210
Inorganics Recovery	0	0	0
Organics Recovery	70	10	1,160
Energy Recovery - Liquids	0	0	0
Energy Recovery - Sludges/Solids	0	0	0
TREATMENT			
Stabilization/Chemical Fixation	0	0	0
Incineration - Liquids and Gases	560	560	2,260
Incineration - Sludges/Solids	40	40	170
Fuel Blending	120	0	0
Hazardous Wastewaters and Sludges Treatment	230	362,090	31,580
DISPOSAL			
Landfill	720	0	0
Deepwell/Underground Injection	0	0	0
Land Treatment/Farming	0	0	0
TRANSFER/STORAGE			
Transfer/Storage	100	780*	0

* Waste transferred to commercial systems (Table 3); Long Term Storage

Table 3. 1991 Management of Hazardous Waste In Commercial Systems

Table 3 presents the demand placed on commercial management systems in 1991, divided into five columns: (1) recurrent waste exported to commercial systems; (2) one-time waste exported to commercial systems; (3) recurrent waste generated and managed within the state in commercial systems; (4) one-time waste generated and managed within the state in commercial systems; and (5) waste imported for management in commercial systems. This table summarizes management by the commercial status of the system, rather than the commercial status of the facility. This distinction is made because commercial facilities can have captive and on-site management systems in addition to the commercially available system(s).

Table 3 distinguishes between recurrent versus one-time waste for waste generated and managed within New York State and exports that placed demand on commercial capacity in 1991 due to the requirement to project demand on commercial capacity from recurrent waste only. Table 3 does not distinguish between recurrent and one-time waste for imports because states do not assure capacity for wastes imported from primary generators.

Residuals from the treatment of imported wastes and the treatment of wastes generated and managed in-state are reported as either recurrent or one-time New York State generated wastes. Secondary treatment residuals that are generated and managed on-site in commercial systems are reported as recurrent waste generated and managed in-state.

Waste quantities generated in New York State and transhipped to in-state management facilities are reallocated to the appropriate in-state CAP management categories. Shipments of wastes to out-of-state management facilities through transfer facilities located in New York State are reallocated to the exports CAP Management categories. Waste quantities that are imported by in-state transfer facilities and subsequently exported for management in another state are reported separately as imports transferred out-of-state.

Apparent transfer coefficients to CAP management categories for New York facilities which transfer wastes received from any off-site sources are presented in the APPENDIX.

Table 3
New York State
1991 Management of Hazardous Waste in Commercial Systems (tons)

CAP Management Category	Exports		Waste Generated and Managed In State		Imports*
	Recurrent	One-time	Recurrent	One-time	
RECOVERY					
Metals Recovery	18,980	260	1,340	620	300
Inorganics Recovery	230	2,140	220	80	0
Organics Recovery	11,090	1,000	1,680	70	400
Energy Recovery - Liquids	5,150	700	740	20	9,630
Energy Recovery - Sludges/Solids	470	120	0	0	0
TREATMENT					
Stabilization/Chemical Fixation	21,210	3,250	5,490	150	77,540
Incineration - Liquids and Gases	7,730	1,180	180	40	0
Incineration - Sludges/Solids	3,030	3,280	120	40	20
Fuel Blending	15,430	1,220	2,290	470	3,540
Hazardous Wastewaters and Sludges Treatment	27,780	21,590	84,090	3,260	15,540
DISPOSAL					
Landfill	10,820	11,750	18,360	43,600	135,200
Deepwell/Underground Injection	1,990	30	0	0	0
Land Treatment/ Farming	0	10	0	0	0
TRANSFER/STORAGE					
Transfer/Storage	4,320	1,270	0	0	0

*Imports cannot be divided into recurrent and one-time wastes due to limitations of information provided on Biennial Report WR forms. 7750 tons of waste imported to New York State transfer facilities was subsequently exported to out-of-state management facilities.

Table 4. Maximum Operational In-state Commercial Subtitle C Management Capacity - End of 1991

Table 4 summarizes the maximum operational in-state commercial management capacity for RCRA Subtitle C hazardous wastes by CAP Management Category. This table is derived from PS forms in 1991 Biennial Reports. Table 4a displays maximum operational in-state RCRA Subtitle C capacity by facility location and CAP Management Category.

Table 4
New York State
Maximum Operational In-state Commercial Subtitle C
Management Capacity - End of 1991 (tons)

CAP Management Category	Maximum Operational In-state Commercial Subtitle C Management Capacity
RECOVERY	
Metals Recovery	27,220
Inorganics Recovery	0
Organics Recovery	1,900
Energy Recovery - Liquids	37,480
Energy Recovery - Sludges/Solids	0
TREATMENT	
Stabilization/Chemical Fixation	125,800
Incineration - Liquids and Gases	40
Incineration - Sludges/Solids	720
Fuel Blending	9,920
Hazardous Wastewaters and Sludges Treatment	778,650
DISPOSAL	
Landfill	308,750
Deepwell/Underground Injection	0
Land Treatment/Farming	0
TRANSFER/STORAGE	
Transfer/Storage	0

Table 4a - Maximum Operational In-State Commercial Subtitle C Management Capacity - End of 1991 (tons/year)

NAME	EPA ID	CAP MANAGEMENT CATEGORIES								
		RECOVERY			THERMAL		TREATMENT			DISPOSAL
		Metals Recovery	Organics Recovery	Energy Recovery Liquids	Incineration Liquids	Incineration Solids	Fuel Blending	Wastewater & Sludges	Stabilization	Landfill ¹
CHEMICAL MANAGEMENT, INC.	NYD000691949							9,926	733	
LEA RONAL INC	NYD001325661	3,628				300				
WEKSLER INSTRUMENTS	NYD005920194		1							
PRIDE SOLVENTS & CHEMICAL	NYD057722258		760							
PHOTOCIRCUITS CORPORATION	NYD096920483							183		
KBF POLLUTION	NYD981182769	23,380						1,169		
BERKMAN BROS	NYD001236017							880		
AT&T NASSAU	NYD086225596					20				
CERAMASEAL	NYD002066173		14							
ASHLAND CHEM	NYD046877775							6		
MERCURY REFINING	NYD048148175	216								
NORLITE CORPORATION	NYD080469935			37,479						
SOLVENTS & PET	NYD013277454		705							
NORTHEAST ENVIRONMENTAL	NYD057770109						2,801	3,380		
STATE UNIVERSITY OF NY	NYD071600100	1								
SCI SYSTEMS INC.	NYD982271793		384							
BDT INC	NYD000632372		35		38	400		2,000		
FRONTIER CHEMICAL	NYD043815703						5,866	5,585		
CWM CHEMICAL SERVICES, INC.	NYD049836679						1,250	535	125,068	308,750
CECOS INTERNATIONAL INC	NYD080336241							755,004		
Statewide Management Capacities		27,230	1,900	37,480	40	720	9,920	778,660	125,800	308,750

1 - Tons Remaining

04/12/94

PHASE 1: PROJECTIONS

PHASE 1 PROJECTIONS

Introduction

This chapter describes the methods used to project New York State's future need for commercial hazardous waste recovery, treatment, and disposal capacity. The 1993 CAP projections focus only on commercial capacity because it is generally expected that on-site and captive capacity will grow as needed to meet the demand for such capacity. Projections include the impact of USEPA regulations that are finalized before the end of the 1992 calendar year, but do not adjust hazardous waste projections for the impacts of economic change.

Baseline

Tables 1-4 present the previous chapter baseyear data that describes hazardous waste management systems in 1991. This baseyear information is used to produce the baseline recurrent demand and capacity data from which projections were made.

Baseline Demand

According to the CAP Guidance document, Baseline demand includes the following types of waste:

- ◆ Primary RCRA Subtitle C hazardous waste generated in state in the baseyear;
- ◆ Primary Non-RCRA Subtitle C hazardous waste that is considered hazardous under state regulations and is managed in hazardous waste management systems; and
- ◆ Treatment residuals generated from management of primary hazardous waste in the baseyear. EPA has assigned the responsibility for projecting demand and assuring capacity for secondary waste (i.e., treatment residuals) based on how the primary waste is treated.

For three CAP Management Categories: Stabilization/Chemical Fixation, Incineration - Liquids and Gases, and Incineration - Sludges/Solids, the state with the primary waste generators are responsible for the residuals; and

For the remaining CAP Management Categories, the state in which the secondary waste is generated is responsible for the residuals.

Baseline demand does not include the following types of waste:

- ◆ One-time wastes, as EPA has developed one-time waste estimates by state to be used in assessing the adequacy of national capacity;
- ◆ Waste imported to the state in the baseyear, because projections should include only waste reasonably expected to be generated in the state in the baseyear;
- ◆ Waste generated by small quantity generators (SQGs);
- ◆ Non-Subtitle C hazardous waste that may use commercial Subtitle C management capacity, except for waste considered hazardous under state regulations;
- ◆ Waste disposed through discharge to a sewer/publicly owned treatment works (POTW);
- ◆ Waste disposed through direct discharge to surface waters under a National Pollutant Discharge Elimination System (NPDES) permit; or
- ◆ Mixed hazardous/radioactive waste.

The baseline recurrent demand for commercial Subtitle C hazardous waste management capacity was estimated by aggregating recurrent waste generated and managed in state in the baseyear (Table 3) and recurrent waste exported in the baseyear (Table 3), by CAP Management Category.

States are responsible for projecting demand and assuring capacity for residuals from wastes imported for management by methods other than stabilization or incineration. Making projections for these wastes does not require any special adjustments because the states' baseline data include residuals generated by in-state management of imported wastes and wastes generated and managed in-state.

Treatment residuals from wastes imported for management by stabilization or incineration require the following adjustments to the base line data:

- 1) Subtracting the demand on landfill capacity from baseyear data for all treatment residuals from stabilization/chemical fixation, incineration -liquids and gases, and incineration - sludges/sludges management categories.
- 2) Adjusting the demand for land disposal capacity for residuals from stabilization or incineration of any wastes generated in New York with the following USEPA multipliers:
 - ◆ Stabilization by 1.5 to represent a demand on commercial landfill capacity;
 - ◆ Incineration - Liquids and Gases by 0.15 to represent the demand on landfill capacity; and
 - ◆ Incineration - Solids/Sludges by 0.225 to represent the demand on landfill capacity.

Reccurent baseline demand for Subtitle C hazardous waste management capacity was adjusted to exclude two large wastestreams:

Olin Corporation (NYD002123461) reported a onetime private remediation of 5700 tons (GM Page 9, lo_pg_num - 2).

Exans Chemet (NYD002234763) reported approximately 1500 tons of waste subsequently reported as non-hazardous (GM page 7, lo_pg_num - 1).

Both wastestreams were removed from the Baseline.

The baseline recurrent demand for Subtitle C hazardous waste management capacity was further adjusted by excluding the baseyear demand on commercial waste management capacity of two closed facilities:

- Frontier Waste Management (NYD043815703)
- Republic Environmental (NYD000691949)

Typically, waste quantities generated by these facilities are residuals from the treatment of hazardous wastes. Based on the treatment performance indicated by GM and PS forms for these facilities, the following rates of residual generation from waste treatment were estimated:

	<u>New York</u>	<u>Out-of-State</u>
Hazardous Wastewater and Sludges Treatment -	2950 tons	3340 tons
Fuel Blending -	5500 tons	2910 tons

As indicated by Table 6, New York has adequate capacity for management of wastes requiring Hazardous Wastewaters and Sludges Treatment. However, additional quantities of wastes requiring Fuel Blending capacity would be exported under the scenario proffered by the USEPA CAP Guidance. Since the residuals are the responsibility of the importing state, only additional Wastewater and Sludges Management capacity has been added to the baseline.

Table 5
Demand for Commercial Hazardous Waste Management Capacity
from Recurrent Waste Expected to be Generated In State (tons)

CAP Management Category	Baseline	Demand for Commercial Subtitle C Management Capacity		
		1993	1999	2013
RECOVERY				
Metals Recovery	18,310	18,560	18,560	18,560
Inorganics Recovery	460	460	460	460
Organics Recovery	12,750	12,720	12,720	12,720
Energy Recovery - Liquids	3,680	3,990	3,990	3,990
Energy Recovery - Sludges/Solids	390	340	340	340
TREATMENT				
Stabilization/Chemical Fixation	24,210	24,240	24,240	24,240
Incineration - Liquids and Gases	7,910	8,020	8,020	8,020
Incineration - Sludges/Solids	3,150	3,320	3,320	3,320
Fuel Blending	13,960	13,860	13,860	13,860
Hazardous Wastewaters and Sludges Treatment	118,060	119,960	119,960	119,960
DISPOSAL				
Landfill	57,010	57,290	57,290	57,290
Deepwell/Underground Injection	480	440	440	440
Land Treatment/Farming	0	0	0	0
TRANSFER/STORAGE				
Transfer/Storage	4,480	*1,550	1,550	1,550

* Transfers to US and Canadian Transfer Facilities

Projections

1993 Demand

Demand estimates for 1993 are required since that is when states make the assurance of availability of capacity for 20 years from the date that these assurances are made. The impacts of Phase I LDRs (57 *Federal Register* 37194, August 18, 1992) and expired LDR capacity variances for certain wastes are included in the CAP analysis since their impact is not reflected in the 1991 Biennial Report data because they became effective after the start of 1991. These regulations may affect changes in RCRA Subtitle C hazardous waste management and residuals generation, as they require treatment of waste previously sent directly to landfills. Wastecodes newly listed in 1991, (EPA Hazardous Waste Codes FO37, and FO38) require a quantitative adjustment to accurately represent a future annual generation rate.

Demand for commercial waste management capacity from recurrent hazardous waste expected to be generated within New York State borders in 1993, was determined as follows:

- ◆ Baseline exports to transfer/storage facilities were reallocated to the appropriate CAP Management Categories based on the percentage distribution of CAP Management Categories to which each out-of-state transfer facility shipped wastes. (Table ?)
- ◆ Wastes that are affected by regulatory changes were separated from wastes that are not affected by regulatory changes by compiling 1991 Biennial Report data by EPA Hazardous Waste code. No newly listed waste quantities (i.e., EPA Hazardous Waste codes FO37 and FO38) requiring a quantitative adjustment were identified in New York's data.
- ◆ Wastestream records containing waste codes affected by regulatory changes were further screened by relevant physical form indicators and disposal methods to identify wastes potentially affected by land disposal restrictions (Exhibit 3-1). The generators of over 90% of the wastes identified were contacted by phone to verify the regulatory status of each of the impacted wastestreams. Demands for alternate management capacity cited by these generators replaced the land disposal demand indicated by baseline management practices. For the remaining wastestreams identified by the Land Disposal Restriction Assessment, the Best Demonstrated Available Technologies indicated on Exhibit 3-1 were substituted for continual land based management of these wastes. As described earlier, the quantities of primary and in-state generated treatment residuals affected by LDR requirements were multiplied by:
 - ◆ 1.5 for wastes requiring Stabilization/Chemical Fixation;
 - ◆ 0.15 for wastes requiring Incineration - Liquids and Gases; and
 - ◆ 0.225 for wastes requiring Incineration - Sludges/Solids.

Exhibit 3-1
Wastes with Expired National Capacity Variances

EPA Hazardous Waste Code	Description	Treatment Standard	Best Demonstrated Available Treatment (BDAT)	Source
D002 ^b	Corrosive wastewater and nonwastewater	Deactivation to remove corrosivity	Deactivation (wastewater/sludge treatment*)	55 FR 22520
D003 ^b	Reactive sulfide wastewater and nonwastewater	Concentration-based	Deactivation (wastewater/sludge treatment*)	55 FR 22520
D004 ^a	Arsenic nonwastewater	Concentration-based	Vitrification (stabilization/chemical fixation)	55 FR 22520
D007 ^a	Chromium wastewater and nonwastewater	Concentration-based	Chrome reduction followed by chemical precipitation (wastewater/sludge treatment*)	55 FR 22520
D009 ^{b,a}	High mercury nonwastewater	Technology-based	Retorting (metals recovery)	55 FR 22520
F007 ^a	Spent cyanide plating bath solutions from electroplating operations	Concentration-based	Wet-air oxidation or alkaline chlorination followed by chemical precipitation (wastewater/sludge treatment*)	54 FR 26594
F039 ^{b,a}	Multi-source leachate wastewaters and nonwastewaters	Concentration-based	Biological treatment followed by chemical precipitation (wastewater/sludge treatment*) for wastewaters or incineration-sludges/solids followed by stabilization (stabilization/chemical fixation) for nonwastewaters	55 FR 22520
K009 ^b	Wastewater distillation bottoms from the production of acetaldehyde from ethylene	Concentration-based	Steam-stripping followed by biological treatment (wastewater/sludge treatment*)	54 FR 26594
K011, K013 ^b	Nonwastewater from acrylonitrile production	Concentration-based	Incineration - sludges/solids	54 FR 26594
K011, K013 ^b	Wastewater from acrylonitrile production	Concentration-based	Wet-air oxidation (wastewater/sludge treatment*)	55 FR 22520
K014 ^{b,a}	Wastewater and nonwastewater from acrylonitrile production	Concentration-based	Wet-air oxidation (wastewater/sludge treatment*)	55 FR 22520
K016 ^b	Heavy ends or distillation residues from carbon tetrachloride production	Concentration-based	Incineration - liquids for wastewaters or biological treatment followed by wet-air oxidation for nonwastewaters (wastewater/sludge treatment*)	53 FR 31138
K031 ^a	Salts from MSMA and cacodylic acid production	Concentration-based	Vitrification (stabilization/chemical fixation)	55 FR 22520
K084 ^a	Sludges from veterinary pharmaceutical production from arsenic compounds	Concentration-based	Vitrification (stabilization/chemical fixation)	55 FR 22520

* Hazardous wastewaters and sludges treatment wastes.

^a Received variance for deepwell injected wastes.

^b Received variance for surface disposed wastes.

SOURCE: "GUIDANCE FOR CAPACITY ASSURANCE PLANNING: CAPACITY PLANNING PURSUANT TO CERCLA §104(c)(9)" - 5/93

Table 3-22
Recurrent Wastes Impacted by Federal Land
Disposal Restrictions Variance Expirations

USEPA Hazardous Waste Code	Quantity (tons)
D002	2,500
D003	1,550
D004	40
D007	5,140
D009	5,960
F007	50
F037	0
F038	0
F039	1,260
K009	0
K011 - Wastewater	0 -
K011 - Nonwastewater	0
K013 - Wastewater	0
K013 - Nonwastewater	0
K013	0
K014	0
K016	0
K031	0
K084	0
K118	0
Total	16,500

Table 3-22b
 Shift in Demand for Commercial Hazardous Waste
 Management Capacity from the Expiration of
 National Variances for
 Land Disposal Restrictions (tons)

CAP Management Category	Quantity (tons)
Metals Recovery	239
Inorganics Recovery	0
Organics Recovery	0
Energy Recovery - Liquids	0
Energy Recovery - Sludges/Solids	0
Stabilization/Chemical Fixation	57
Incineration - Liquids and Gases	44
Incineration - Sludges/Solids	119
Fuel Blending	0
Hazardous Wastewaters and Sludges Treatment	1826
Landfill	-480
Deepwell/Underground Injection	-24
Transfer/Storage	-1694

1993 - 2013 Demand

New York State assumed that demand for commercial RCRA Subtitle C hazardous waste management capacity from hazardous waste expected to be generated within the State is constant from 1993 to 2013.

Baseline Capacity

Baseline commercial capacity is the existing 1993 operational capacity located within New York State. The baseyear renewable capacity figures from Table 4, less the waste management capacities from two facilities (i.e. Frontier, Republic Environmental) closed since 1991, are reflected in the Baseline column of Table 6. The quantity of nonrenewable land disposal capacity available in 1993 was obtained from the Form PS of the 1992 New York State Annual Reports submitted in 1993.

Projections

For all CAP Management Categories except commercial landfill capacity, New York State assumed that capacity available in 1993 is available to the year 2013.

Consequently, the "Maximum In-State Commercial Subtitle C Management Capacities" for the years indicated on Table 6 reflect the difference between the Baseline column of Table 6 and the relevant "Demand for Commercial Subtitle C Management Capacity" of Table 5.

The estimated amounts of commercial landfill capacity that is expected to be used between the start of 1993 and each of the remaining projection years (1999 and 2013) is calculated by multiplying the demand for commercial landfill capacity in 1993 (Table 5) by the number of years and subtracting this quantity from the Land Disposal Capacity remaining in 1993 (Table 6).

Table 6
Expected Maximum In-state Commercial Subtitle C
Management Capacity (tons)

CAP Management Category	Baseline	Maximum In-state Commercial Subtitle C Management Capacity		
		1993	1999	2013
RECOVERY				
Metals Recovery	27,220	8,660	8,660	8,660
Inorganics Recovery	0	-460	-460	-460
Organics Recovery	1,900	-10,820	-10,820	-10,820
Energy Recovery - Liquids	37,480	33,490	33,490	33,490
Energy Recovery - Sludges/Solids	0	-340	-340	-340
TREATMENT				
Stabilization/Chemical Fixation	125,070	100,830	100,803	100,830
Incineration - Liquids and Gases	40	-7,980	-7,980	-7,980
Incineration - Sludges/Solids	720	-2,600	-2,600	-2,600
Fuel Blending	4,050	-9,810	-9,810	- 9,810
Hazardous Wastewaters and Sludges Treatment	755,970	642,300	642,300	642,300
DISPOSAL				
Landfill	308,750	374,770	31,010	-771,100
Deepwell/Underground Injection	0	-440	-440	-440
Land Treatment/Farming	0	0	0	0
TRANSFER/STORAGE				
Transfer/Storage	0	*1,550	1,550	1,550

- Indicates Capacity Shortfall

* Transfers to a Canadian Transfer Facility

STATE WASTE MINIMIZATION ACTIVITIES

Overview of Waste Minimization Activities

New York State feels that a waste minimization program is a key step toward sound hazardous waste management, and that states should vigorously pursue waste minimization as a central component when addressing waste management.

New York State's top hazardous waste priority is waste reduction. The New York State Department of Environmental Conservation (NYSDEC) has developed a program to implement ECL 27-0908 and 27-0105. This program requires companies to reduce their hazardous waste generation, with a goal of 20% reduction over the next five(5) years. The Department is adopting a multi-faceted approach to waste reduction. This requires all industries to develop and use programs to reduce the use of toxic substances and the generation of hazardous waste and to submit to NYSDCE a Hazardous Waste Reduction Plan (HWRP) discussing their goals and objectives. HWRP are required to be submitted by all TSDFs and all generators of 50 tones or more in calendar years 1993 and 1994, and 25 tons or more for calendar 1995 or later. The written plans are due to NYSDCE by July 1st of the following calendar year. Also, a coordinated effort among NYSDCE's Air, Water and Hazardous Substances programs will ultimately result in reducing the amount of toxic substances and hazardous wastes generated and disposed of.

In developing the State Siting Plan, New York has devoted significant resources in deciding the potential for waste reduction activities to reduce the demand for new management capacity. In this connection, New York has implemented a comprehensive hazardous waste reduction program. The State Siting Plan has formally incorporated a five(5%)percent annual reduction target for the period 1994-1998; four (4%) percent for 1999-2003; three(3%)percent for 2004-2008 and two(2%)percent for 2009-2013. These targets are applied to all waste streams and industry groups, and form New York's so-called "5-4-3-2" waste reduction plan.

To achieve these objectives, New York provides a substantial budget in combined Federal and State funds. These funds are used to provide a full range of waste reduction services to all sizes of generators in all types of industries. New York is also working to ensure communication and obtain reactions from industry so that the effectiveness of the programs and the validity of the goals can be measured.

Multimedia Waste Reduction

A focal point of New York's current waste minimization activities is its multimedia waste reduction program. The NYSDEC has received a USEPA Pollution Prevention Incentives to States Grant to expand its technical assistance activities to all environmental media. The major elements of this program are:

1. To pilot multimedia, pollution prevention programs for small business. This will expand the State's small business stationary source technical and environmental compliance assistance program that was established by section 507 of the Clean Air Act Amendments.
2. To continue and expand the Department's multimedia pollution prevention technical assistance and outreach programs.
3. To pilot a solid waste reduction effort aimed at solid waste generated at grocery stores.

New York recognizes that to achieve maximum compliance with the hierarchy of preferred management practices, reduction of hazardous waste generation must be accorded the highest priority. The NYSDEC is developing multimedia waste regulations as part of its program of carrying out the preferred management practices hierarchy. The schedule calls for completing the multimedia waste reduction regulations by the Spring of 1994. These regulations will require hazardous waste generators and toxic substance emitters to submit Toxic Chemical Reduction Plans(TCRP). These plans will contain industries' program for reducing generation of hazardous waste and toxic substances across all media, and will be subject to NYSDEC approval.

In summary, New York believes that its waste reduction program is ambitious, but achievable, in view of the very important task and the resources available.

APPENDIX

3.4 REVIEW CRITERIA FOR PROJECTIONS

EPA is providing the following checklists to assist states in developing their projections. EPA will also use these checklists as criteria to evaluate the reasonableness and completeness of state projections.

1. Do the projections account for any significant changes in state regulations that became effective after the start of 1991?

- ☐ Yes, projections have been adjusted for state regulatory changes. (Describe the regulatory changes and adjustments.)
- ☒ No, such changes have not occurred.
- ☐ No, such changes have occurred but the projections have not been adjusted. (Attach explanation.)

2. Have the baseyear data been adjusted to create a baseline?

Are the types of wastes included in the baseline consistent with the instructions on pages 3-1 and 3-2?

- ☒ Yes.
- ☐ No. (Attach explanation.)

Does baseline demand exclude imports and include exports?

- ☒ Yes.
- ☐ No. (Attach explanation.)

3. Does the baseline demand incorporate adjustments for treatment residuals?

Have residuals from wastes exported for Stabilization/Chemical Fixation, Incineration - Liquids and Gases, and Incineration - Solids/Sludges been included in the baseline?

- ☒ Yes.
- ☐ No. (Attach explanation.)

Have residuals from wastes imported for Stabilization/Chemical Fixation, Incineration - Liquids and Gases, and Incineration - Solids/Sludges been excluded from the baseline?

- ☒ Yes.
- ☐ No. (Attach explanation.)

Have residual multiplication factors of 1.5, 0.15, and 0.225 been used for

Stabilization/Chemical Fixation, Incineration - Liquids and Gases, and Incineration - Solids/Sludges, respectively?

- ☒ Yes.
☐ No. (Attach rationale for using other factor

Are residuals from other CAP Management Categories included in the baseline demand?

- ☒ Yes.
☐ No. (Attach explanation.)

4. Have demand and capacity been projected for 1993, 1999, and 2013?

Does the projected 1993 demand reflect any changes other than for regulatory change? (See question 5 on regulatory change.)

- ☒ Yes. (Attach explanation of the changes and the reasons for them.) (see page x)
☐ No.

Is the projected 1999 demand the same as the 1993 demand?

- ☒ Yes.
☐ No. (Attach explanation of the changes and the reasons for them.)

Is the projected 2013 demand the same as the 1999 demand?

- ☒ Yes.
☐ No. (Attach explanation of the changes and the reasons for them.)

Do the 1993, 1999, and 2013 capacity projections deplete landfill capacity using the formulas described in section 3.1?

- ☒ Yes.
☐ No. (Attach explanation.)

Is the projected capacity for all other CAP Management Categories constant for all projection years?

- ☒ Yes.
☐ No, new capacity has become operational. (Identify the new capacity.)
☐ No, existing capacity has closed. (Identify the closed capacity.)
☐ No, existing capacity is scheduled to close. (Identify the capacity to be closed and the reason for closure.)
☐ No, for other reasons. (Attach explanation.)

Does the state have any statutory limitations on the amount of waste a landfill can accept?

- ☐ Yes.
☒ No. (Attach explanation.)

5. Do your 1993 projections account for the effect of expired national capacity variances and Phase I LDRs on hazardous waste management?

- ☒ Yes, for both expired variances and Phase I LDRs. (Attach description of data sources used to make projections.)
☐ No, projections for expired variances were not made. (Provide rationale below.)
☐ No, projections for Phase I newly listed wastes were not made. (Provide rationale below.)

Explain the rationale for excluding special LDR projections.

- ☐ There are no facilities in our state that generate wastes affected by expired LDR capacity variances.
☐ There are no facilities in our state that generate newly listed wastes affected by Phase I LDRs. (Stop here.)
☐ Our state has facilities that generate wastes that are addressed in the LDR developments, but generation and management of these wastes is not expected to change between 1991 and 2013 due to LDRs. (Attach explanation and stop here.)
☐ Other rationale. (Attach explanation and stop here.)

6. The remaining questions focus on how your state conducted steps 2 and 3 of the regulatory change projection method and the results that were obtained for the LDRs.

Step 2 Determine the quantity of these wastes generated in 1991, by EPA Hazardous Waste code.

What quantity of wastes affected by LDRs do you estimate were generated in your state in 1991? If 1991 was not used as the baseyear, report what baseyear was used.

USEPA Hazardous Waste Code	Quantity (tons)
D002	2,500
D003	1,550
D004	40
D007	5,140
D009	5,960
F007	50
F037	0
F038	0
F039	1,260
K009	0
K011 - Wastewater	0
K011 - Nonwastewater	0
K013 - Wastewater	0
K013 - Nonwastewater	0
K013	0
K014	0
K016	0
K031	0
K084	0
K118	0
Total	16,500

What data source(s) were used to estimate this generation?

- ☒ 1991 Biennial Report forms.
☐ Other. (Attach citation and description.)

Step 3 Identify how and in what types of facilities these wastes and their residuals will be managed in 1993.

What data sources were used to apportion future generation to specific CAP Management Categories?

- ☒ BDATs identified in this Guidance.
☐ 1991 Biennial Report forms.
☐ Other. (Attach citation and description.)

What data sources were used to estimate the generation and management of treatment residuals?

- ☒ 1991 Biennial Report forms.
☐ Other. (Attach citation and description.)

What data sources were used to apportion future generation to specific facility types?

- ☒ 1991 Biennial Report forms.
☐ Other. (Attach citation and description.)

Indicate in the table below how wastes that are affected by LDRs were allocated to CAP Management Categories for 1993 projections. Indicate subtractions from a CAP Management Category using parentheses.

CAP Management Category	Quantity (tons)
Metals Recovery	239
Inorganics Recovery	0
Organics Recovery	0
Energy Recovery - Liquids	0
Energy Recovery - Sludges/Solids	0
Stabilization/Chemical Fixation	57
Incineration - Liquids and Gases	44
Incineration - Sludges/Solids	119
Fuel Blending	0
Hazardous Wastewaters and Sludges Treatment	1826
Landfill	-480
Deepwell/Underground Injection	-24
Transfer/Storage	-1694

Distribution of CAP Management Categories Utilized By New York Transfer Facilities In 1991

NAME	EPA ID	CAP MANAGEMENT CATEGORIES											
		RECOVERY					THERMAL		TREATMENT			DISPOSAL	
		Metals Recovery	Organics Recovery	InOrganics Recovery	Energy Recovery Solids	Energy Recovery Liquids	Incineration Liquids	Incineration Solids	Fuel Blending	Wastewater & Sludges	Stabilization	Landfill	Deepwell
SOUTH SENECA JR-SR HIGH	NYD000332825							100.0					
UNIVERSITY OF ROCHESTER	NYD000631994								25.8	0.1			
CHEMICAL MANAGEMENT, INC.	NYD000691949	6.3	15.4				0.1	1.4	2.8	71.5	0.6	0.1	
CENTRAL HUDSON GAS & ELECTIC	NYD000705905									65.3			
SAFETY-KLEEN	NYD000708184		4.4										
SAFETY-KLEEN	NYD000708172		98.3						1.2				
SAFETY-KLEEN	NYD000708198		64.3										
SAFETY-KLEEN	NYD000708208		100.0										
ROCHESTER G & E CORP. -	NYD000818781	19.3					73.0	7.7					
SAFETY-KLEEN	NYD000824581		87.2										
AUROMET CORP	NYD001234087												
ADEMCO	NYD001530138	100.0											
GRUMMAN AEROSPACE	NYD002047967		7.8				26.5		63.1				
DECORA MANUFACTURING	NYD002067932		100.0										
SCHENECTADY CHEMICALS, INC.	NYD002070118								100.0				
MAGTROL INC.	NYD002111920												
COOPER POWER	NYD002123651						100.0						
INDUST CERAMICS INC	NYD002210714		11.7	10.2						78.1			
GOULD PUMPS INC	NYD002227304						94.7				5.3		
YONKERS CONT	NYD006995682												
SHOREWOOD	NYD010026391									100.0			
FRONTIER CHEMICAL	NYD043815703		0.2				1.8	0.8	0.4	66.5	27.7	0.2	1.1
BECTON DICKINSON ACUTECARE	NYD045844531							100.0					
N D L ORGANIZATION	NYD045662921								100.0				
RADIAC RESEARCH CORP	NYD049178296				3.6		0.7	8.1	62.6	24.3		0.6	
ASHLAND CHEMICAL INC	NYD049253719		31.3				0.9	2.1	43.6	6.5	8.2	0.5	
CWM CHEMICAL SERVICES, INC.	NYD049836679	0.2	7.2	0.2			14.8	49.8	0.7	11.7		1.9	8.6

Distribution of CAP Management Categories Utilized By New York Transfer Facilities In 1991

NAME	EPA ID	CAP MANAGEMENT CATEGORIES											
		RECOVERY					THERMAL		TREATMENT			DISPOSAL	
		Metals Recovery	Organics Recovery	InOrganics Recovery	Energy Recovery Solids	Energy Recovery Liquids	Incineration Liquids	Incineration Solids	Fuel Blending	Wastewater & Sludges	Stabilization	Landfill	Deepwell
NORTHEAST ENVIRONMENTAL	NYD057770109	1.7	43.5				0.2	0.3	5.1	10.2	33.1	5.7	
ENTENMANN'S	NYD061986750									100.0			
GE COMPANY	NYD067539940	11.9					30.6					57.5	
MATCO TOOLS	NYD068886621									100.0			
FIAT PRODUCTS	NYD072377575						100.0						
KEAMOTOR CAR CORP	NYD075432229												
CHEM WST DSP	NYD077444263	2.2					8.1	7.1	51.9	14.3		3.6	
INTERNATIONAL BUSINESS	NYD080480734	0.6					3.3	34.1	1.0	0.1		60.2	
CHEMICAL POLLUTION CONTROL	NYD082785429		0.9		21.7		0.8	0.4	14.6	1.8	18.3	32.7	8.8
AT&T NASSAU	NYD086225598	100.0											
GENERAL ELECTRIC	NYD093256063		77.1										
SENECA FOODS CORPORATION	NYD094411139												
INDUSTRIAL OILTANK SERVICE	NYD095577342					27.0				73.0			
GENPAK CORPORATION	NYD098191192												
HEVI-DUTY ELECTRIC	NYD980641890						0.1			99.9			
SAFETY-KLEEN	NYD980753784		98.4										
DELAWARE COUNTY ELECTRIC	NYD980756019												
SAFETY-KLEEN	NYD980785760		100.0										
S L AUBURN	NYD981133317		64.3										
NATIONAL FUEL GAS-NASHVILLE	NYD981177306									100.0			
NATIONAL FUEL GAS PORTERVILLE	NYD981177314									100.0			
NATION FUEL GAS ZOAR STA	NYD981177330									100.0			
STATE UNIV OF NY AT	NYD981485758												
BOCES-CATTARAUGUS ALLEGANY	NYD981555337												
SAFETY-KLEEN	NYD981556541		81.6										
M & G CONVOY	NYD981559222		100.0										
SAFETY KLEEN	NYD986872889		87.4										

Distribution of CAP Management Categories Utilized By New York Transfer Facilities In 1991

NAME	EPA ID	CAP MANAGEMENT CATEGORIES											
		RECOVERY					THERMAL		TREATMENT			DISPOSAL	
		Metals Recovery	Organics Recovery	InOrganics Recovery	Energy Recovery Solids	Energy Recovery Liquids	Incineration Liquids	Incineration Solids	Fuel Blending	Wastewater & Sludges	Stabilization	Landfill	Deepwell
NYSDOT	NYD986886539												
NYSDOT	NYD986886729									100.0			
NORTHERN FERTILIZER CHEMICAL	NYD986887638												
R L CALLAHAN INC	NYD986926780												
STANTON AG SERVICE INC	NYD986928471						100.0						
U R SAULPAUGH & SONS	NYD986928935												
BIKETT MILLS	NYD986929149												
CACCAMO CIBRO	NYD986930501												
WILTSIE CONSTRUCTION	NYD986934081												
NATIONAL FUEL GAS	NYD986937082									100.0			
LAVOY GAS STATION	NYD986937803						100.0						
CB STRAIN	NYD986952331									100.0			
KOLAR MACHIN	NYD986960367								100.0				
AEROSOURCE INC	NYD986963932								100.0				

Distribution of CAP Management Categories Utilized By Out of State Transfer Facilities in 1991

NAME	EPA ID	CAP MANAGEMENT CATEGORIES											
		RECOVERY					THERMAL		TREATMENT			DISPOSAL	
		Metals Recovery	Organics Recovery	InOrganics Recovery	Energy Recovery Solids	Energy Recovery Liquids	Incineration Liquids	Incineration Solids	Fuel Blending	Wastewater & Sludges	Stabilization	Landfill	Deepwell
SAFETY-KLEEN CORP.	PAD987266715		93.4										
NORTHLAND ENVIRONMENTAL INC	RID040098352										100.0		
SAFETY-KLEEN CORP 2 105 01	VTD000791899		88.2										
POLLUTION SOLUTIONS OF	VTD982766537						19.7	0.3	53.7	7.1	1.0	13.9	